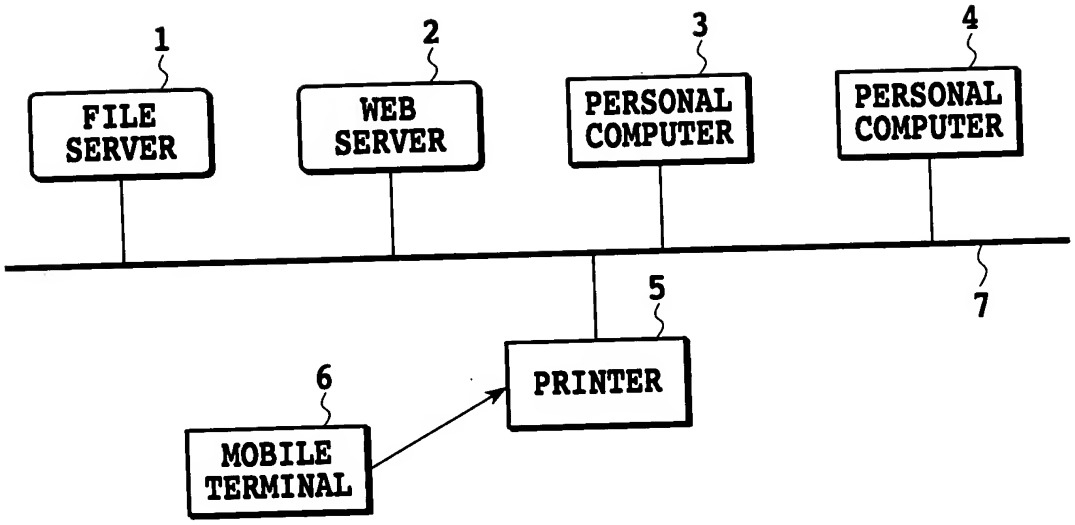
1
FILE SERVER
2
WEB SERVER
3
PERSONAL COMPUTER
4
PERSONAL COMPUTER
5
PRINTER
6
MOBILE TERMINAL
7

FIG.1

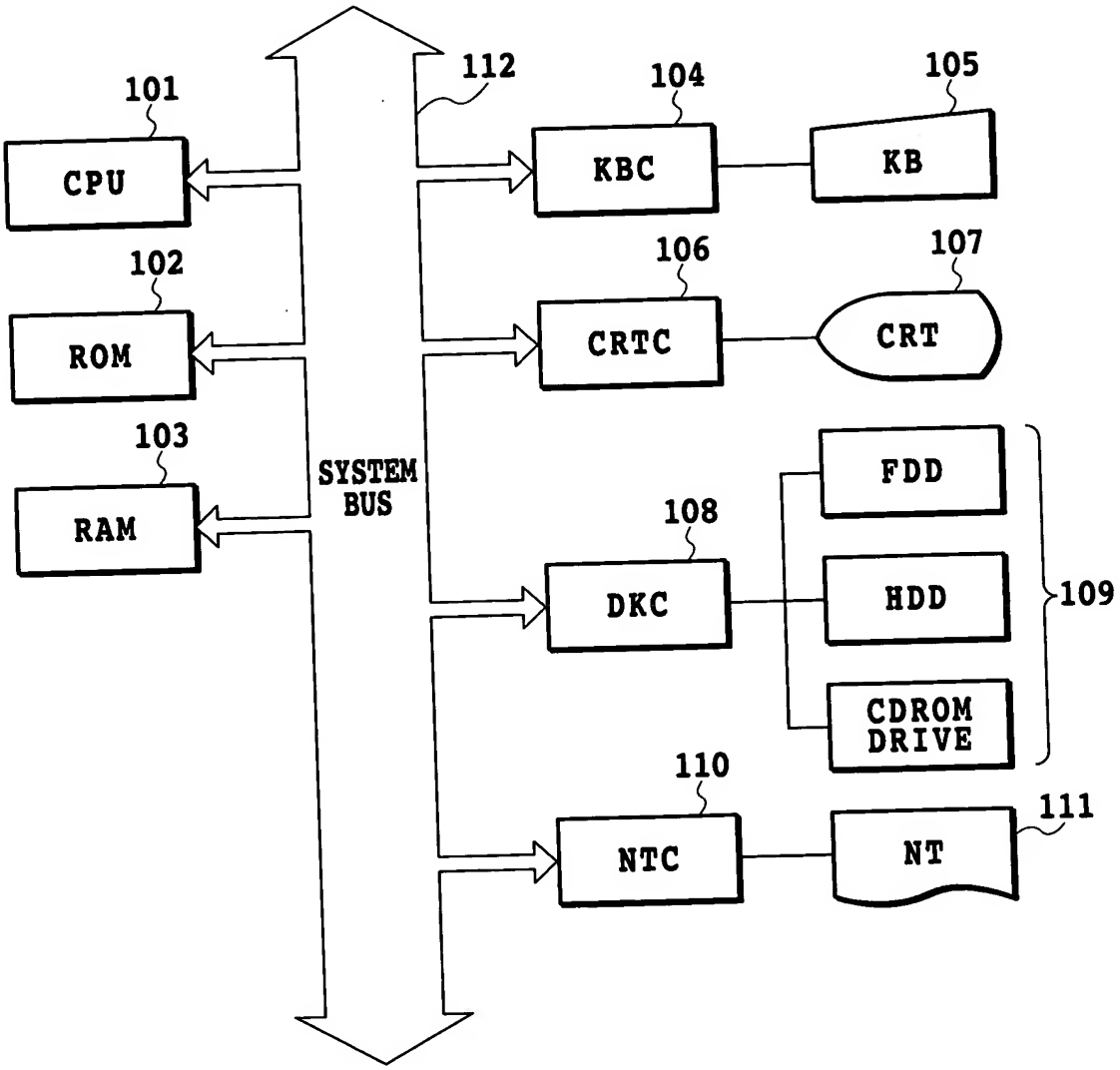
101
CPU
102
ROM
103
RAM
SYSTEM BUS
112
104
KBC
105
KB
106
CRTC
107
CRT
108
DKC
FDD
HDD
CDROM DRIVE
109
110
NTC
111
NT

FIG.2

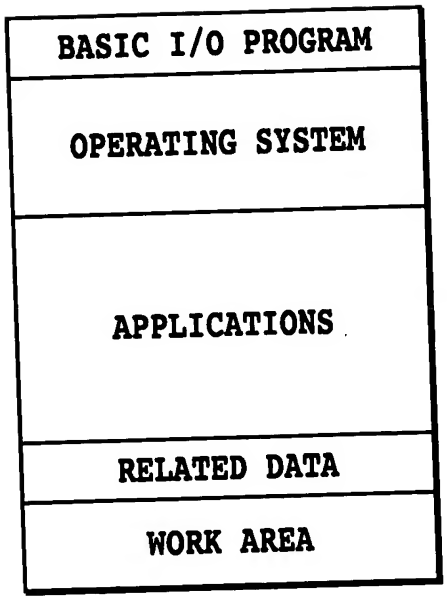
BASIC I/O PROGRAM
OPERATING SYSTEM
APPLICATIONS
RELATED DATA
WORK AREA

FIG.3

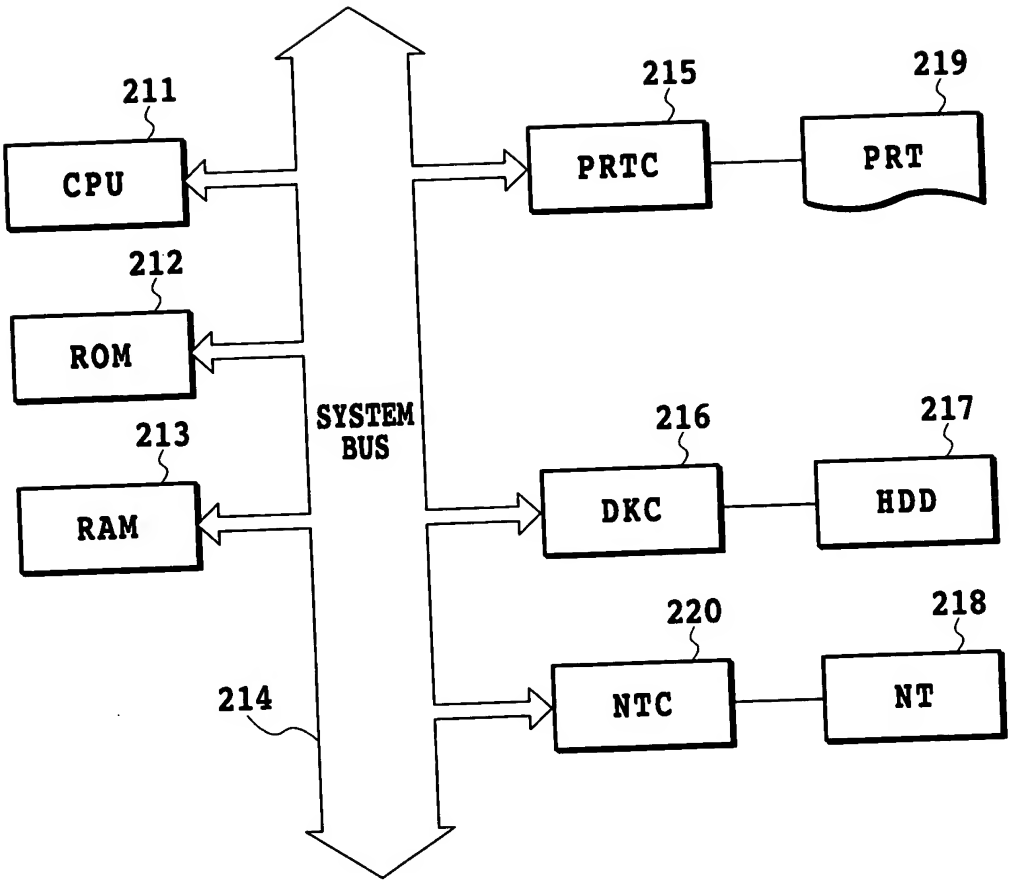
211
CPU
212
ROM
213
RAM
214
SYSTEM
BUS
215
PRTC
219
PRT
216
DKC
217
HDD
220
NTC
218
NT

FIG.4

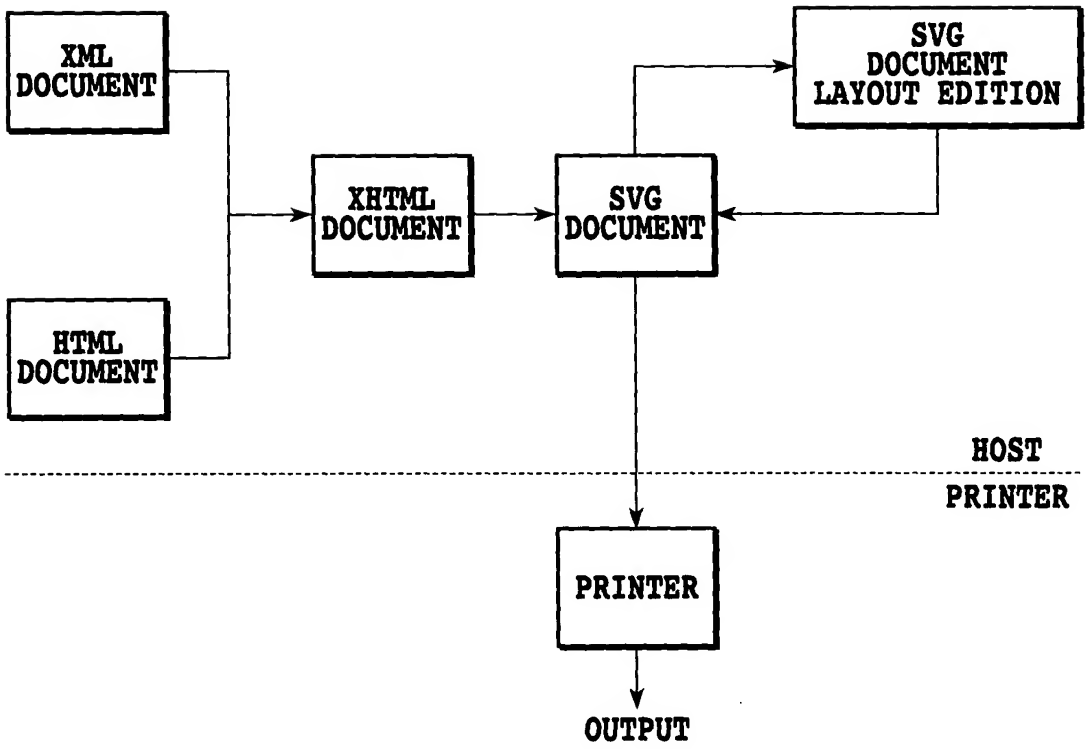
XML DOCUMENT
HTML DOCUMENT
XHTML DOCUMENT
SVG DOCUMENT
SVG DOCUMENT LAYOUT EDITION
HOST
PRINTER
PRINTER
OUTPUT

FIG.5

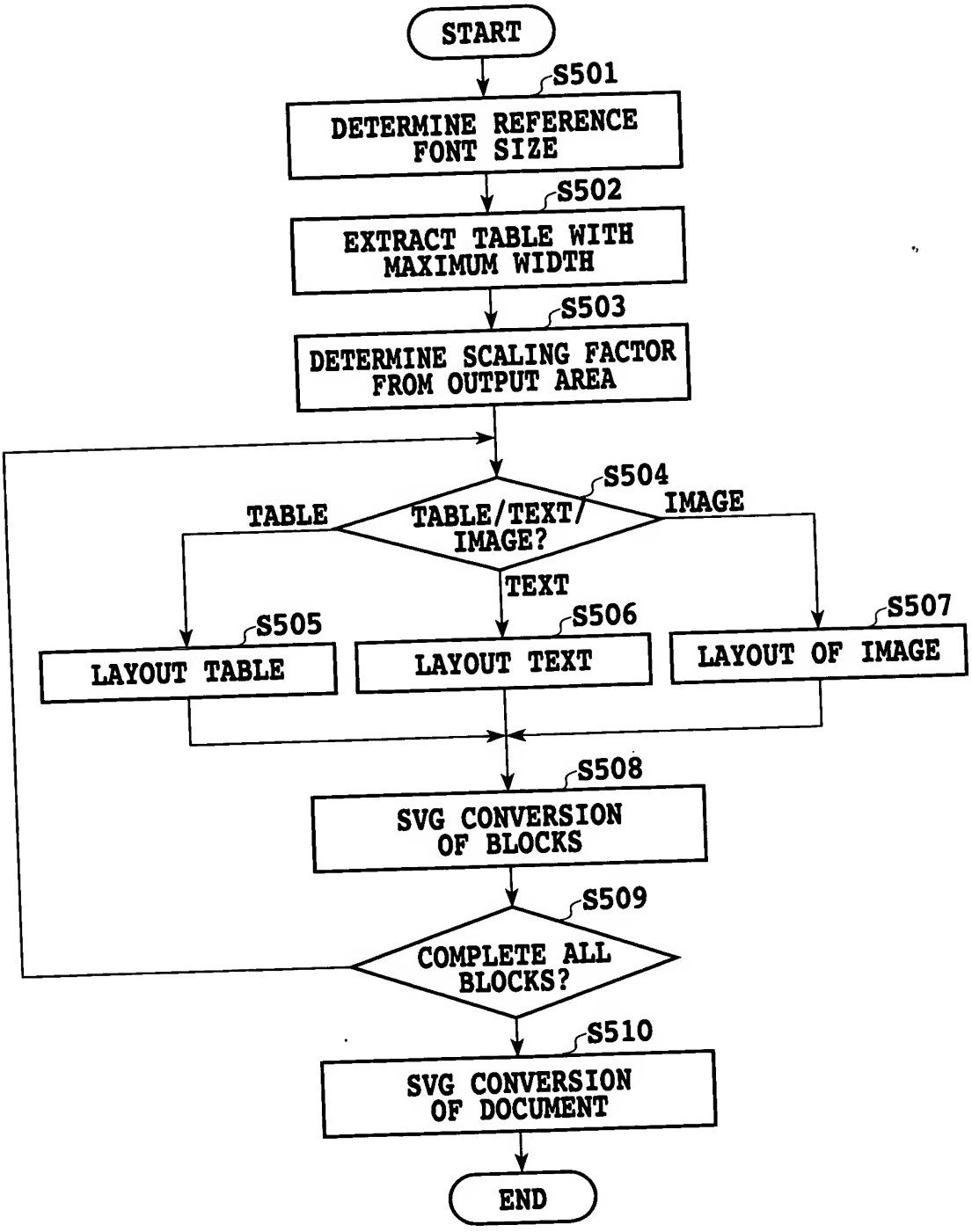
START
S501
DETERMINE REFERENCE FONT SIZE
S502
EXTRACT TABLE WITH MAXIMUM WIDTH
S503
DETERMINE SCALING FACTOR FROM OUTPUT AREA
S504
TABLE/TEXT/IMAGE?
TABLE
TEXT
IMAGE
S505
LAYOUT TABLE
S506
LAYOUT TEXT
S507
LAYOUT OF IMAGE
S508
SVG CONVERSION OF BLOCKS
S509
COMPLETE ALL BLOCKS?
S510
SVG CONVERSION OF DOCUMENT
END

FIG.6

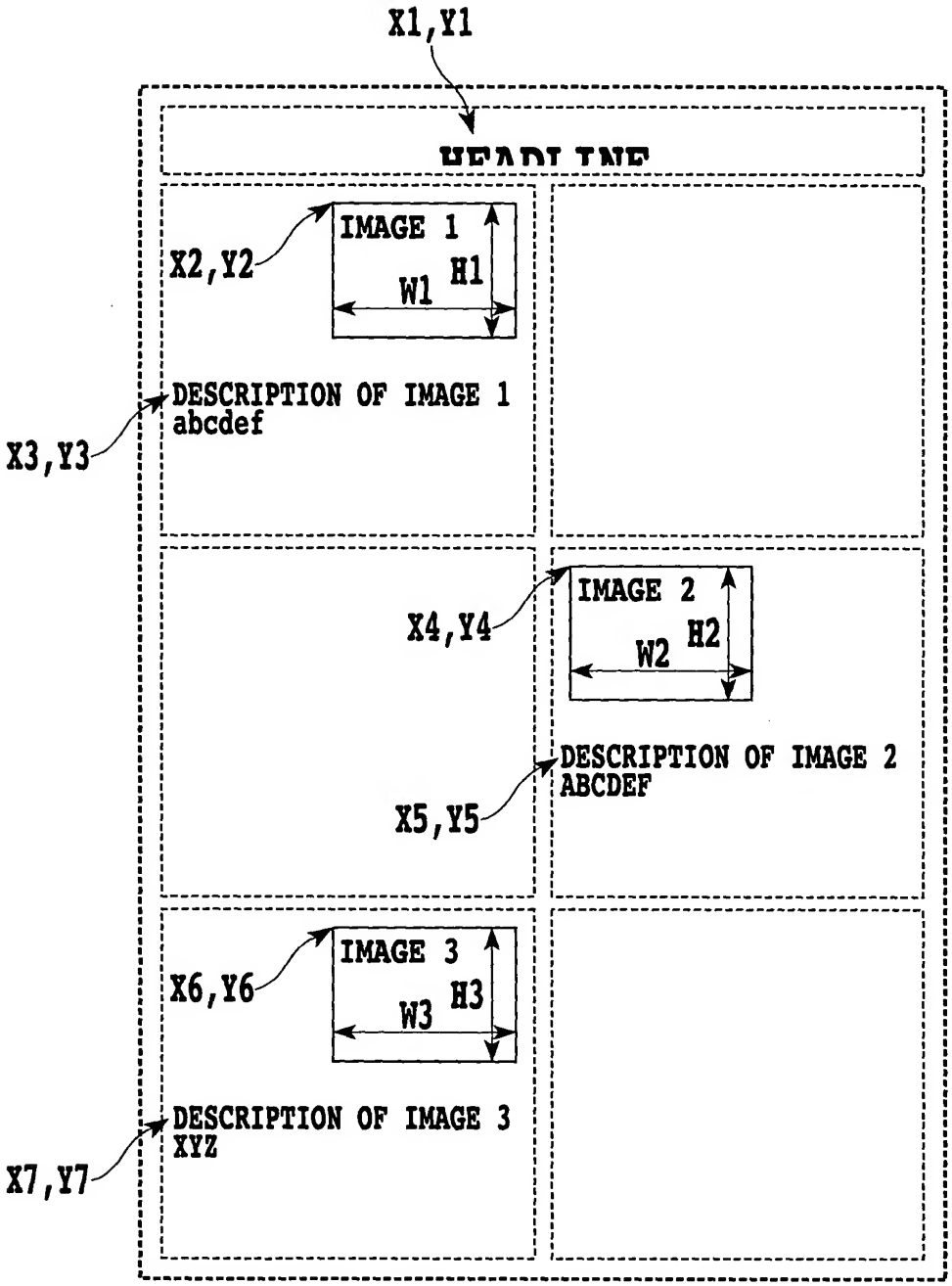
X1,Y1
HEADLINE
X2,Y2
IMAGE 1
W1
H1
DESCRIPTION OF IMAGE 1
abcdef
X3,Y3
X4,Y4
IMAGE 2
W2
H2
DESCRIPTION OF IMAGE 2
ABCDEF
X5,Y5
X6,Y6
IMAGE 3
W3
H3
DESCRIPTION OF IMAGE 3
XYZ
X7,Y7

FIG.7

```
<xhtml>
<table border=" 0" cellpadding=" 0" cellspacing=" 8" >
  <tr>
    <td align=" center" colspan=" 2" width=" 50%" ><font size=" 6" ><em>HEADLINE
</em></font></td>
  </tr>
  <tr>
    <td align=" right" width=" 50%" ><img src=" IMAGE 1.jpg" width=" 50%" >
      <br><br>
      DESCRIPTION OF IMAGE 1.abcdef.....
    </td>
    <td align=" right" width=" 50%" ></td>
  </tr>
  <tr>
    <td width=" 50%" ></td>
    <td width=" 50%" ><img src=" IMAGE 2.jpg" width=" 50%" >
      <br><br>
      DESCRIPTION OF IMAGE 2.ABCDEF
    </td>
  </tr>
  <tr>
    <td align=" right" width=" 50%" ><img src=" IMAGE 3.jpg" width=" 50%" >
      <br><br>
      DESCRIPTION OF IMAGE 3.XYZ
    </td>
    <td width=" 50%" ></td>
  </tr>
</table>
</xhtml>
```

FIG.8

```
<svg>
    <text font-family:gothic font-size:20pt font-weight:bold font-style:italic x=X1
y=Y1>
    HEADLINE
    </text>
    <image x=X2 y=Y2 width=W1 height=H1>
    IMAGE 1.jpg
    </image>
    <text font-family:mincho font-size:10pt x=X3 y=Y3>
    DESCRIPTION OF IMAGE 1.abcdef.....
    </text>
    <image x=X4 y=Y4 width=W2 height=H2>
    IMAGE 2.jpg
    </image>
    <text font-family:mincho font-size:10pt x=X5 y=Y5>
    DESCRIPTION OF IMAGE 2.ABCDEF.....
    </text>
    <image x=X6 y=Y6 width=W3 height=H3>
    IMAGE 3.jpg
    </image>
    <text font-family:mincho font-size:10pt x=X7 y=Y7>
    DESCRIPTION OF IMAGE 3.XYZ.....
    </text>
</svg>
```

FIG.9

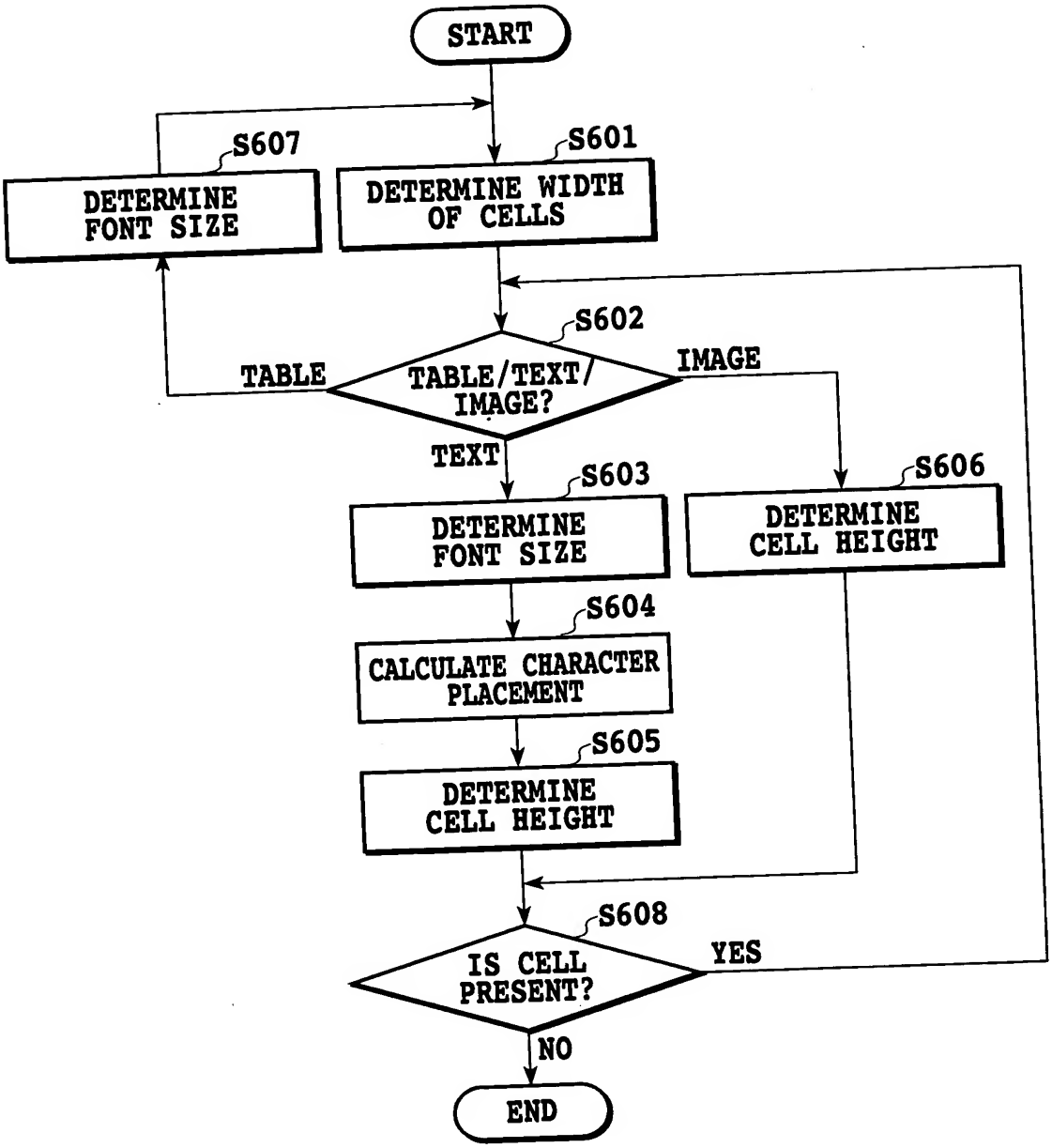
START
S607
DETERMINE FONT SIZE
S601
DETERMINE WIDTH OF CELLS
S602
TABLE
TABLE/TEXT/ IMAGE?
IMAGE
TEXT
S603
DETERMINE FONT SIZE
S606
DETERMINE CELL HEIGHT
S604
CALCULATE CHARACTER PLACEMENT
S605
DETERMINE CELL HEIGHT
S608
IS CELL PRESENT?
YES
NO
END

FIG.10

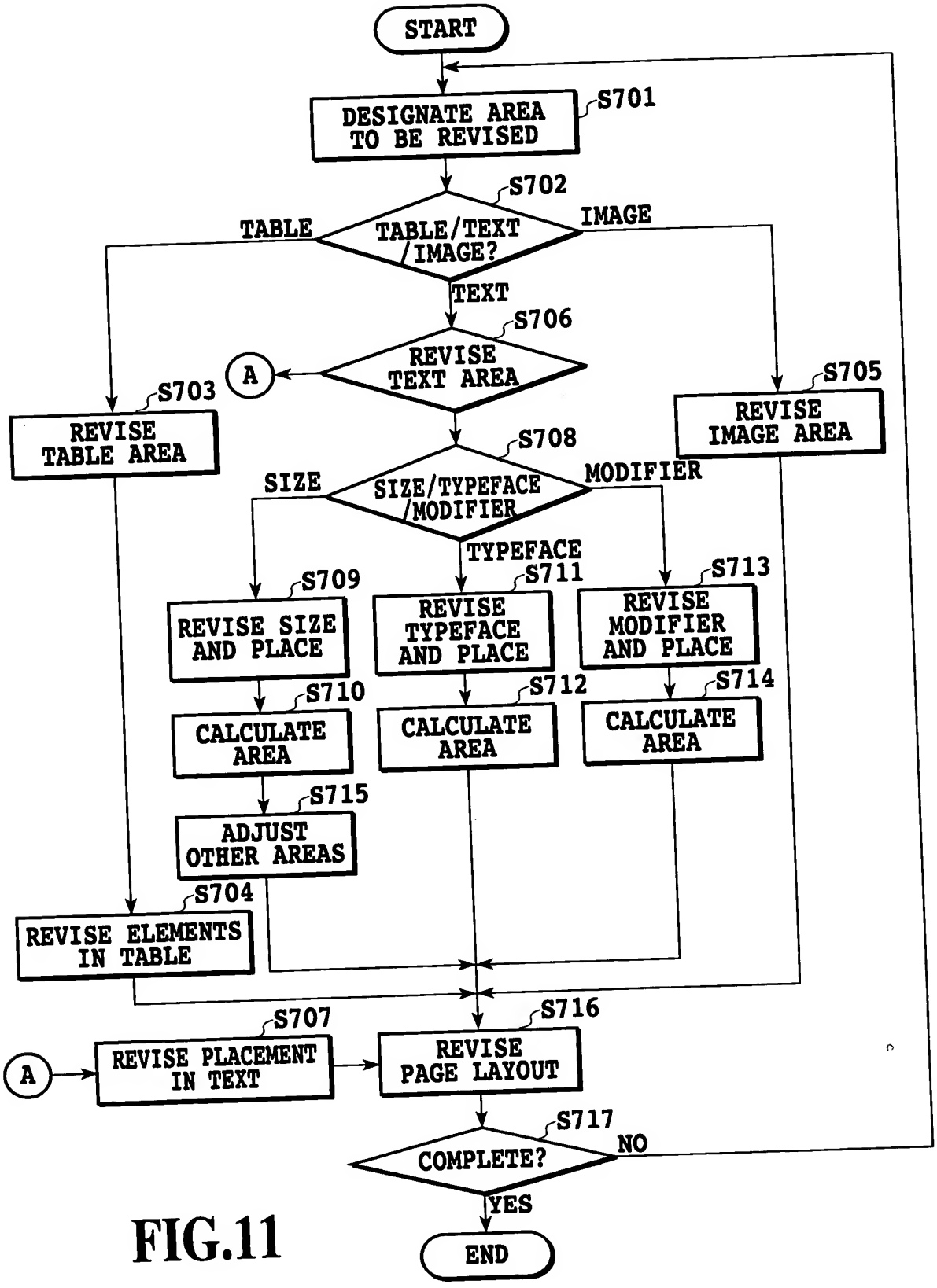
START
DESIGNATE AREA TO BE REVISED
S701
S702
TABLE/TEXT /IMAGE?
TABLE
IMAGE
TEXT
S706
REVISE TEXT AREA
A
S703
REVISE TABLE AREA
S705
REVISE IMAGE AREA
S708
SIZE/TYPEFACE /MODIFIER
SIZE
MODIFIER
TYPEFACE
S709
REVISE SIZE AND PLACE
S711
REVISE TYPEFACE AND PLACE
S713
REVISE MODIFIER AND PLACE
S710
CALCULATE AREA
S712
CALCULATE AREA
S714
CALCULATE AREA
S715
ADJUST OTHER AREAS
S704
REVISE ELEMENTS IN TABLE
S707
A
REVISE PLACEMENT IN TEXT
S716
REVISE PAGE LAYOUT
S717
COMPLETE?
NO
YES
END

FIG.11

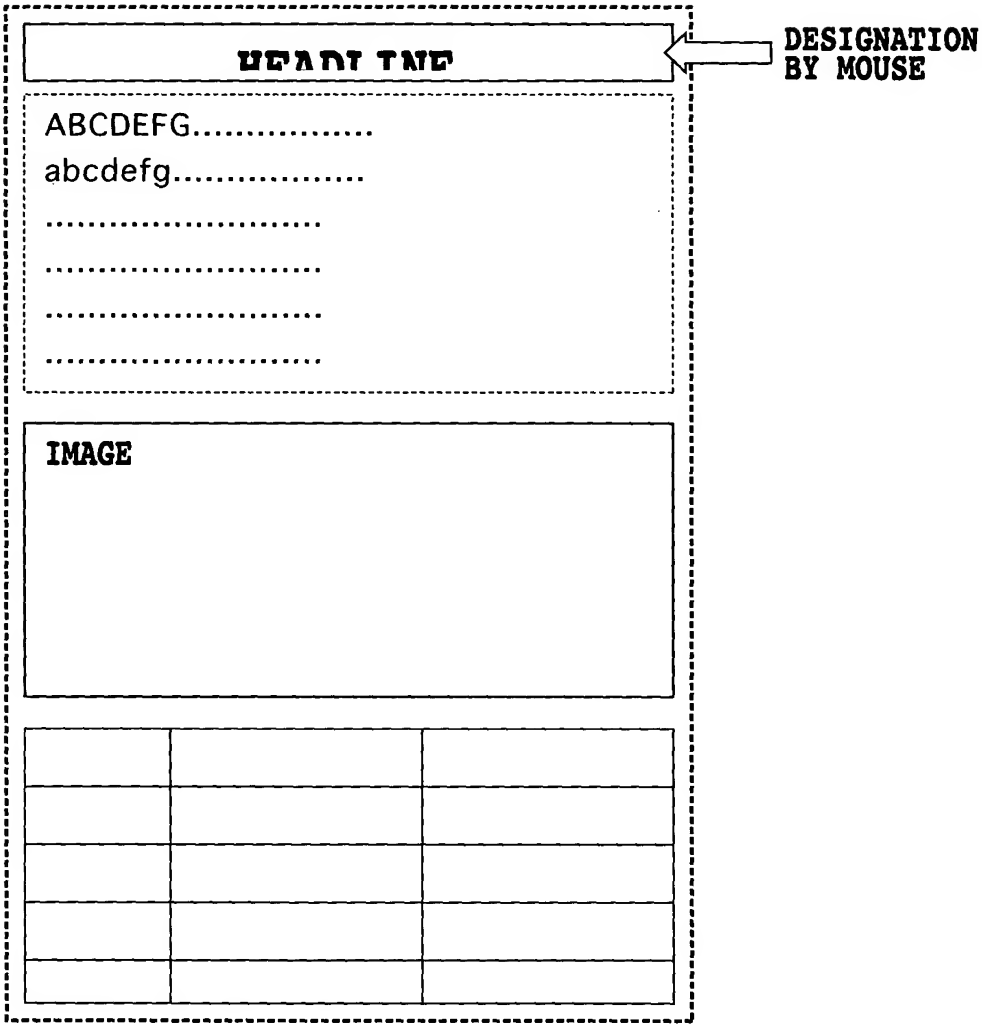

FIG.12

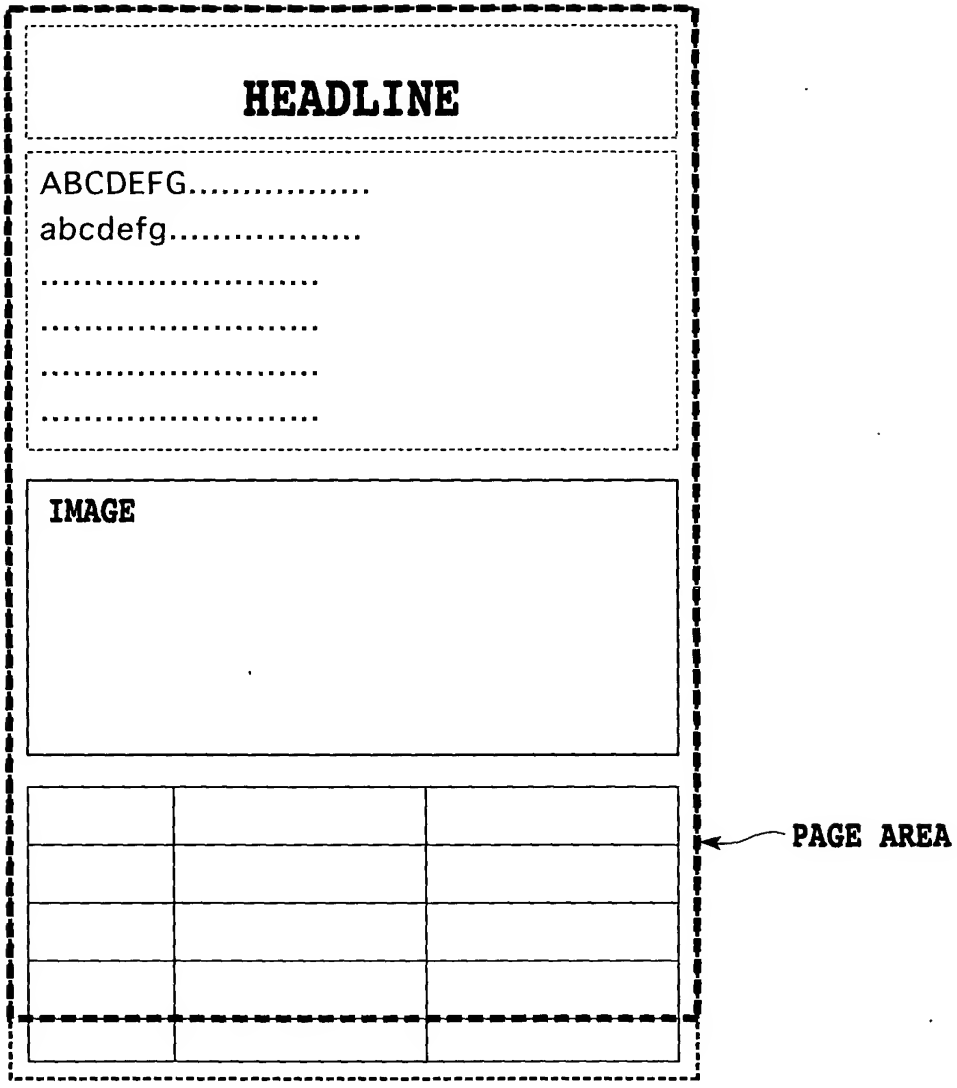

FIG.13

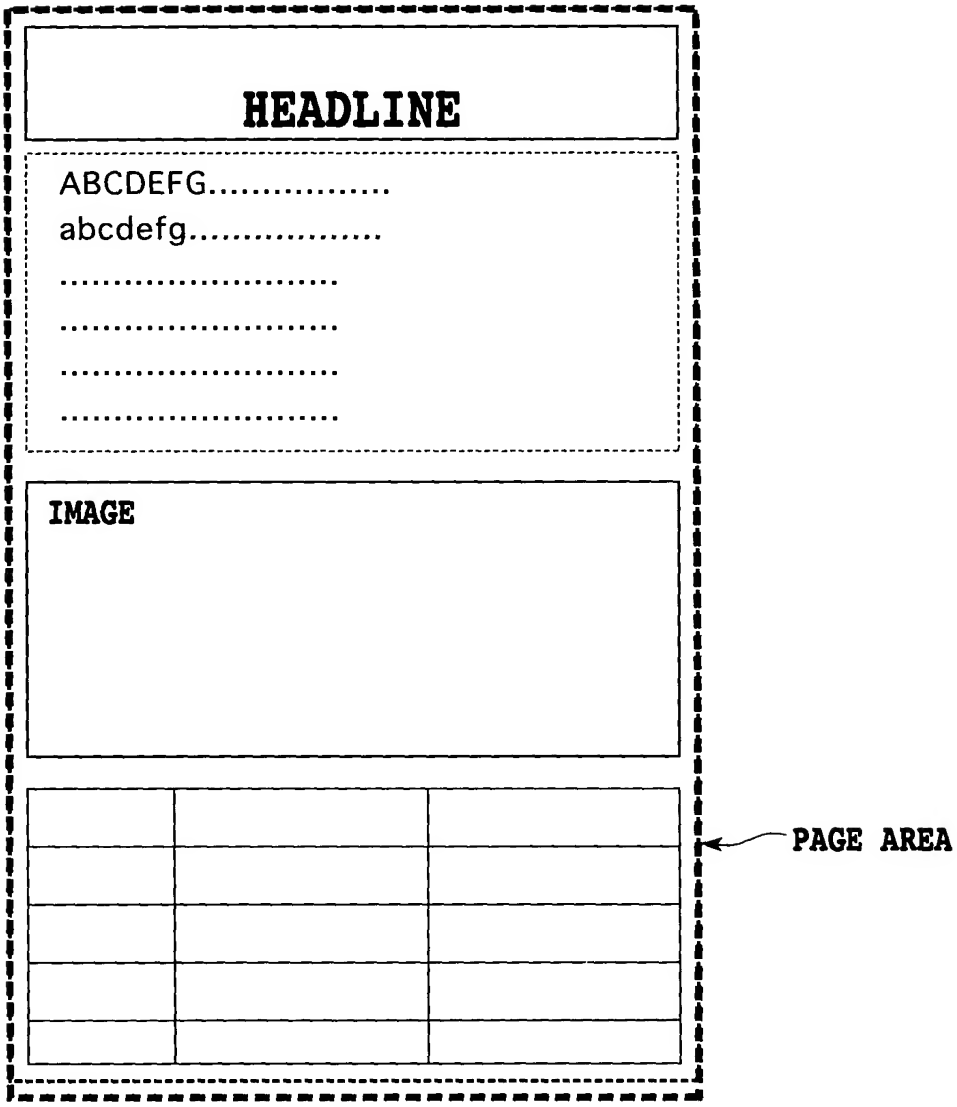

FIG.14

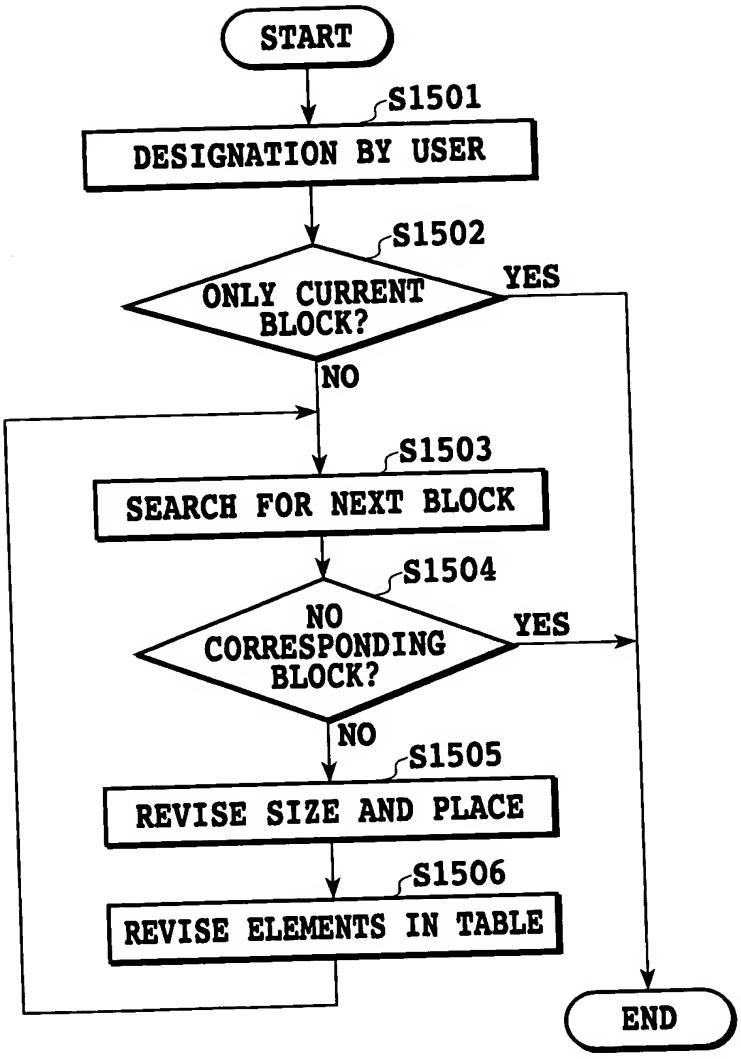
START
S1501
DESIGNATION BY USER
S1502
ONLY CURRENT BLOCK?
YES
NO
S1503
SEARCH FOR NEXT BLOCK
S1504
NO CORRESPONDING BLOCK?
YES
NO
S1505
REVISE SIZE AND PLACE
S1506
REVISE ELEMENTS IN TABLE
END

FIG.15

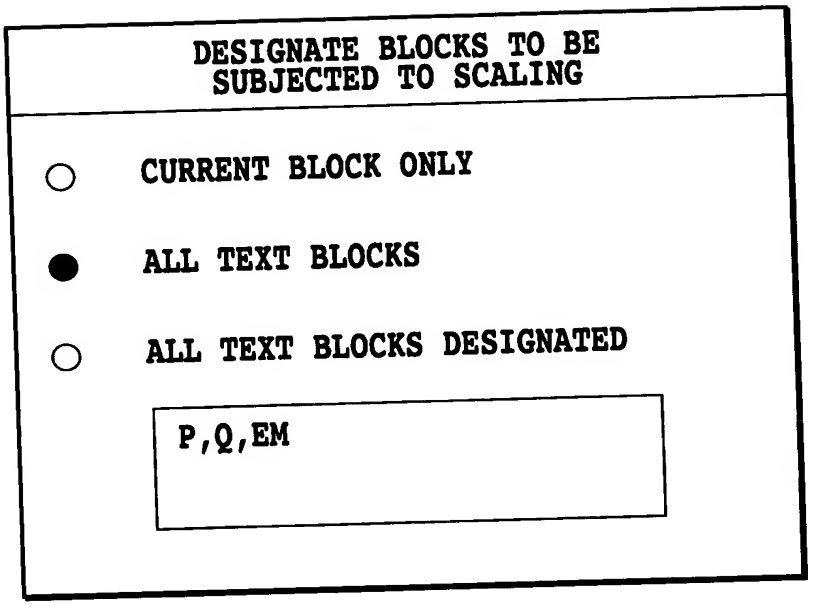
DESIGNATE BLOCKS TO BE SUBJECTED TO SCALING
CURRENT BLOCK ONLY
ALL TEXT BLOCKS
ALL TEXT BLOCKS DESIGNATED
P,Q,EM

FIG.16

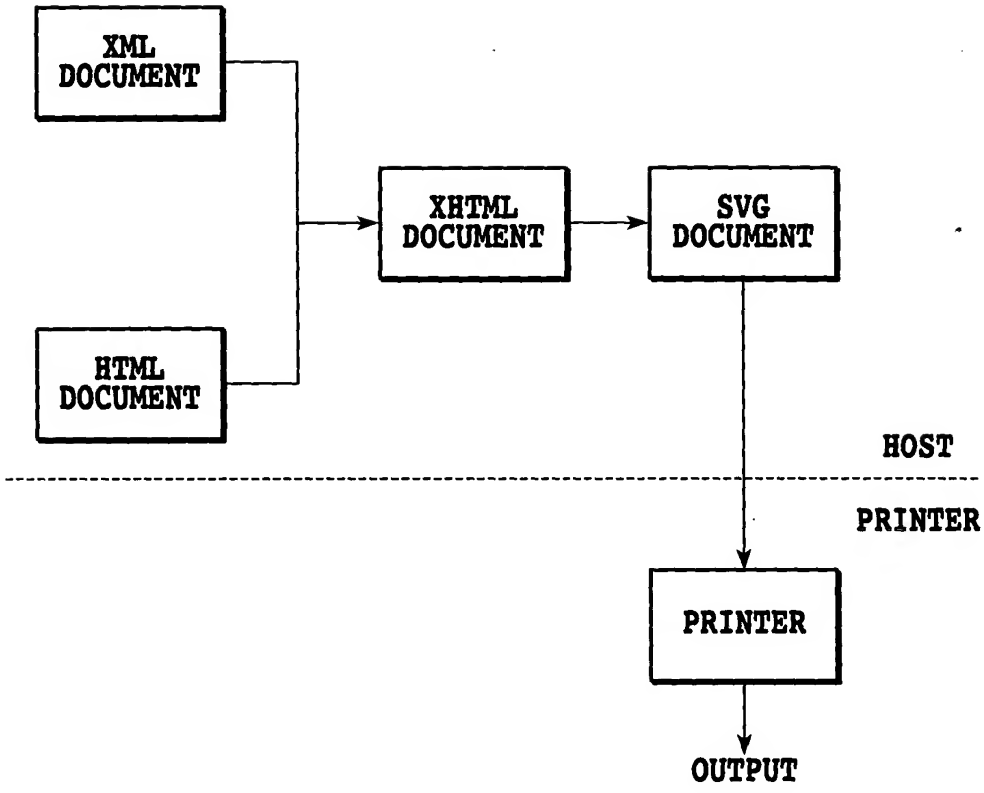
XML DOCUMENT
HTML DOCUMENT
XHTML DOCUMENT
SVG DOCUMENT
HOST
PRINTER
PRINTER
OUTPUT

FIG.17

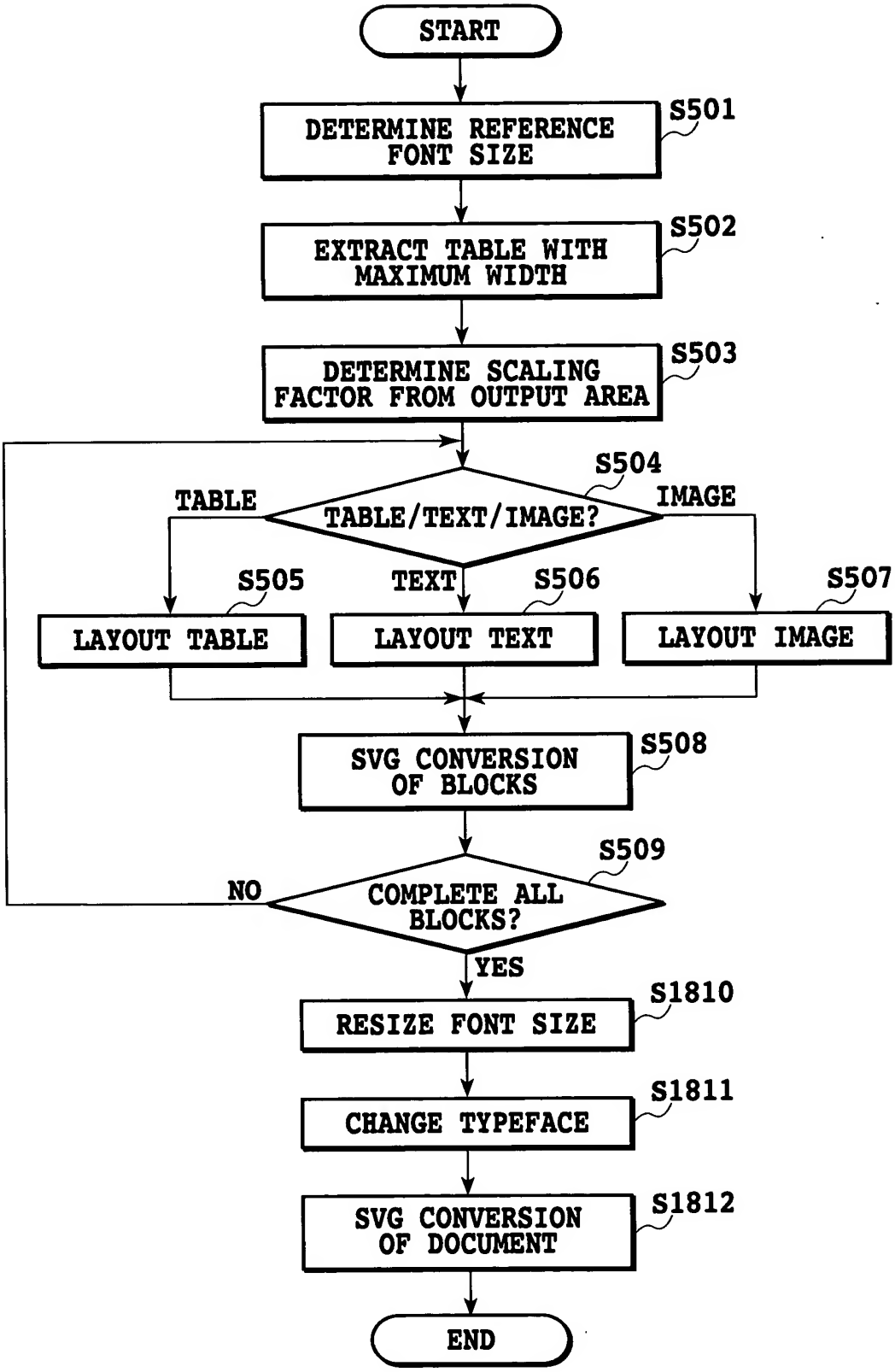
START
DETERMINE REFERENCE FONT SIZE
S501
EXTRACT TABLE WITH MAXIMUM WIDTH
S502
DETERMINE SCALING FACTOR FROM OUTPUT AREA
S503
S504
TABLE/TEXT/IMAGE?
TABLE
IMAGE
S505
TEXT
S506
S507
LAYOUT TABLE
LAYOUT TEXT
LAYOUT IMAGE
SVG CONVERSION OF BLOCKS
S508
S509
NO
COMPLETE ALL BLOCKS?
YES
RESIZE FONT SIZE
S1810
CHANGE TYPEFACE
S1811
SVG CONVERSION OF DOCUMENT
S1812
END

FIG.18

	MORE THAN 60P	6P～5P	5P～4P	LESS THAN 4P
A MINCHO TYPEFACE W3	A	A	A	D
B MINCHO TYPEFACE W5	B	B	A	D
C MINCHO TYPEFACE W7	C	C	A	D
D GOTHIC TYPEFACE W3	D	D	D	D
E GOTHIC TYPEFACE W5	E	E	D	D
F GOTHIC TYPEFACE W7	F	F	D	D
G GYOSHO	G	G	H	D
H KAISHO	H	H	H	D

FIG.19

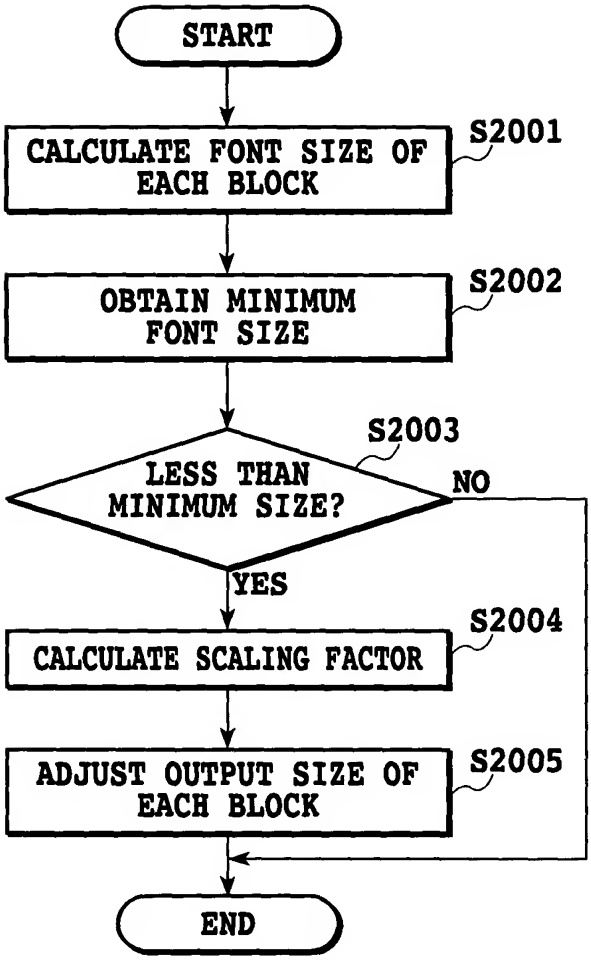
START
CALCULATE FONT SIZE OF EACH BLOCK
S2001
OBTAIN MINIMUM FONT SIZE
S2002
LESS THAN MINIMUM SIZE?
S2003
NO
YES
CALCULATE SCALING FACTOR
S2004
ADJUST OUTPUT SIZE OF EACH BLOCK
S2005
END

FIG.20

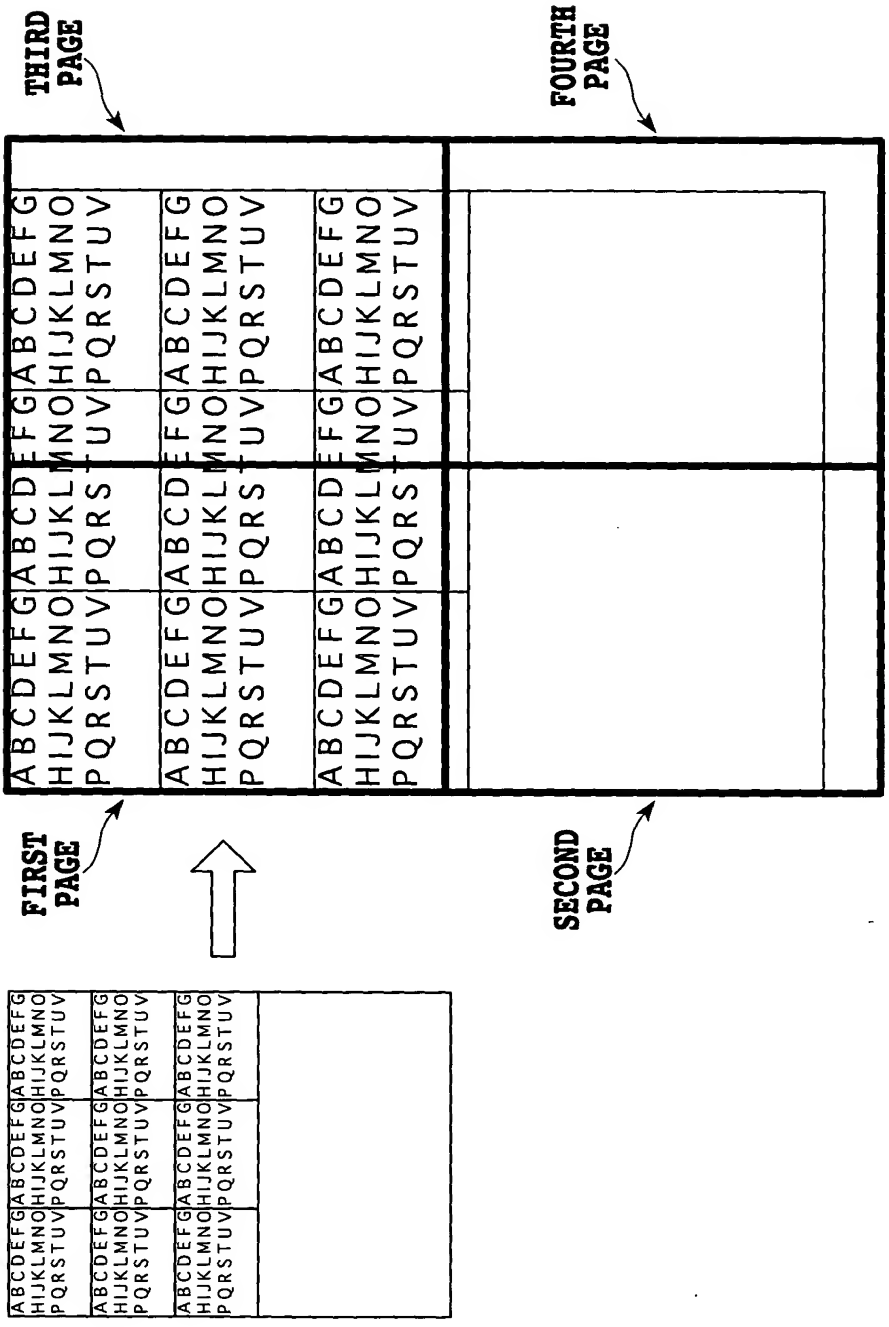

FIG.21